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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,420	04/19/2001	Frederic Bauchot	FR920000032US1	3568

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IBM CORP. (WIP)
c/o WALDER INTELLECTUAL PROPERTY LAW, P.C.
P.O. BOX 832745
RICHARDSON, TX 75083

EXAMINER	
STEVENS, ROBERT	
ART UNIT	PAPER NUMBER
2162	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/22/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/838,420	BAUCHOT ET AL.	
	Examiner	Art Unit	
	Robert Stevens	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-9 and 12-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-9 and 12-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The Office withdraws the previous rejections of the claims under 35 USC §§101 and 112-1st and 2nd paragraphs, in light of the amendment. The Office maintains the previous rejections of the claims under 35 USC §103(a), in light of the amendment. However, the Office sets forth a new rejection of the claims under 35 USC §112-2nd paragraph, in light of the amendment.

2. Applicant is invited to contact the Examiner to arrange for an interview with the Examiner and Primary Examiner in mid-January.

Response to Arguments

3. Applicant's arguments filed 10/5/2006 have been fully considered but they are not persuasive.

Applicant's arguments on pages 9-13 of the amendment regarding the previous objections to the specification and rejections of the claims under §112-1st and 2nd paragraphs are moot in light of the withdrawal of these objections/rejections.

Applicant argues on pages 13-19 that each of the references does not teach the claim limitations.

The Office respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). For instance, the argument on page 15 that Kaneko does not teach Boolean variable use is irrelevant, as Kaneko was not relied upon for such teachings. Additionally, on page 17 Kernighan is criticized for not teaching user options table and interface. However, Kernighan was merely relied upon as evidence of the well-known use of boolean variables. Applicant further argues that Kaneko does not teach the use of "user data tables in a spreadsheet". The Office respectfully disagrees, noting that a "table", as used by Applicant is merely a region of a spreadsheet. Applicant raises similar arguments regarding independent claims 15 and 21, and the dependent claims on page 17and claims 2, 3 and 14 on pages 18-19. The Office respectfully disagrees with these arguments, and re-asserts the counter arguments set forth above.

Applicant argues on page 20 that each of the references, including Michelman, does not teach the claim limitations, using the rationale of claims 1, 15 and 21.

The Office respectfully disagrees with these arguments, and re-asserts the counter arguments set forth above.

Applicant argues on pages 20-22 that each of the references, including Kelly, does not teach the claim limitations, using the rationale of claims 1, 15 and 21, and that the addition of an editor to the recited limitations does not merely add an editor limitation.

The Office respectfully disagrees with these arguments, and re-asserts the counter arguments set forth above, noting that Kelly was cited for its teachings regarding editing.

Applicant argues on page 22 that each of the references, including Michelman and Kelly, does not teach the claim limitations, using the rationale of claims 1, 15 and 21.

The Office respectfully disagrees with these arguments, and re-asserts the counter arguments set forth above.

For at least these reasons, the Office asserts the rejections of the claims as set forth below.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> **Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.**

5. **Claims 1-5, 7-9 and 12-23 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application with useful, concrete and tangible result.

A practical application can be either physical transformation or a useful, concrete and tangible result.

Independent claim 1 is directed to steps of providing an electronic table and interfacing to the table to select a variable (i.e., an option) to determine the value of spreadsheet cells. Additionally, an output mechanism is recited. However, it is noted that no use is made of the "determined values" of lines 18-20. As such, these claims are non-statutory under 35 USC 101, because the invention recited therein does not produce a useful, concrete and tangible result.

Claims 2-5, 7-9 and 12-14 depend upon claim 1, and do not correct the deficiencies of that claim. These claims are likewise rejected.

Regarding independent claims 15 and 21: These claims are substantially similar to claim 1. As such, these claims are likewise rejected.

Claims 16-20 and 22-23 depend upon claims 15 and 21, respectively, and do not correct the deficiencies of those claims. These claims are therefore likewise rejected.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 1-5, 7-9 and 12-23 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding independent claim 1: There appears to be at least one missing essential step/element. There are a series of recited steps culminating in a "value determination" step. A further step indicates that an output mechanism is provided. However, there is no "assigning" step, for example, that would assign the "determined value" to each cell. The Office interprets "determining a value" as an act of performing a calculation. As such, the scope of this claim is vague and indefinite.

Claims 2-5, 7-9 and 12-14 depend upon claim 1, and are likewise rejected.

Regarding independent claims 15 and 21: These claims are substantially similar to claim 1. As such, these claims are likewise rejected.

Claims 16-20 and 22-23 depend upon claims 15 and 21, respectively, and are therefore likewise rejected.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. **Claims 1-3, 12-14 and 21-22 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Kaneko et al. (US Patent No. 5,708,827, filed Sep. 18, 1995 and issued Jan. 13, 1998, hereafter referred to as "Kaneko") in view of Kjaer et al. (US Patent Application Publication No. 2002/0091728, filed Dec. 6, 1995 and published Jul. 11, 2002, hereafter referred to as "Kjaer") and further in view of Brian W. Kernighan et al. (The C Programming Language, Prentice-Hall, Inc., Englewood Cliffs, NJ, © 1978, page 41, hereafter referred to as "Kernighan").

Independent claim 1 states:

A method in a computer system, for processing user defined Boolean variables in a multidimensional electronic spreadsheet comprising a plurality of cells identified by a cell address along each dimension, said method comprising the steps of:

providing, in the computer system, a user options table data structure identifying one or more user options that are defined as Boolean variables, wherein the user options table data structure comprises a record for each user option of the one or more user options, and wherein each record stores an identifier associated with a corresponding user option for the record;

providing a user interface, in the computer system, through which the one or more user options are defined, wherein a status of the one or more user options is set via the user interface to either a first Boolean variable state corresponding to a "True" state or a second Boolean variable state corresponding to a "False" state;

referencing a selected user option of the one or more user options in one or a plurality of cells of the multi-dimensional electronic spreadsheet by including an identifier associated with the selected user option in content of the one or a plurality of cells;

determining a value of each of the one or plurality of cells based on a status of the selected user option as either being the first Boolean variable state or the second Boolean variable state, as specified via the user interface; and

providing an output of the multi-dimensional electronic spreadsheet via an output device of the computer system.

Regarding these limitations ...

Kaneko teaches a Merchandise Sales Table in Figure 2A, disclosing "Merchandise a" through "Merchandise c" identifiers in rows or records in the Merchandise Sales Table, wherein the "Merchandise a" through "Merchandise c" options are associated with variables (e.g., unit price). Kaneko teaches the spreadsheet graphical user interface (GUI) in Figures 2A and 3A for entering data, noting that data values for "unit price", for example, are set/changed via the user editing

the appropriate spreadsheet cell. Kaneko discloses referencing "unit price" and "sales volume" variables in order to determine the value of "sales amount of money" In Figure 2A and column 4 lines 27-36. Kaneko also discloses the display of a spreadsheet in Figure 2A, showing a spreadsheet window, and the Abstract, discussing spreadsheet display on a display device.

However, Kaneko does not explicitly teach multi-dimensional spreadsheets. Kjaer, though, teaches multidimensional spreadsheets in [0008], disclosing visualizing a series of two-dimensional spreadsheets as a notebook having a plurality of pages (i.e., the conventionally known "multi-dimensional" spreadsheet). Kjaer also teaches multidimensional spreadsheets in [0009], disclosing a three-dimensional spreadsheet having data, charts and formulas for generating charts on each spreadsheet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kjaer for the benefit of Kaneko, because to do so would have allowed a programmer to address spreadsheet cells by a different number of variables, thereby minimizing memory and processing time requirements in a multi-dimensional electronic spreadsheet system, as taught by Kjaer in the Abstract. These references were all applicable to the same field of endeavor, i.e., spreadsheet applications.

Additionally, Kaneko does not explicitly teach the use of Boolean variable states. Kernighan, though, teaches the well-known programming concept of Boolean variable

states, disclosing the use of 0 to represent a "False" state and 1 to represent a "True" state.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kernighan for the benefit of Kaneko in view of Kjaer, because to do so would have allowed a programmer to test for a condition (i.e., whether a condition was true), as taught by Kernighan in the first paragraph on page 41. These references were all applicable to the same field of endeavor, i.e., computer programming.

Regarding dependent claim 2: Kaneko teaches a spreadsheet table of records in Figure 2A, disclosing a spreadsheet table of records having fields for the type of merchandise, a price option associated with the record (labeled as "unit price") and a value for each unit price record field (e.g., 150). The specific data/fields employed in a record were an obvious variant to one skilled in the art at the time of the invention.

Regarding dependent claim 3: Kaneko teaches a spreadsheet table of records in Figure 2A, in which user options (e.g., "sales price") is listed for the current status of the record, and a field is selected and modified directly by a user, with those modifications being reflected in the updating of the "sales amount of money" field of the modified record. Figure 1 further shows a calculation formula list display unit for listing formula options #25, a reference area extracting unit #23 for identifying the current

status of user option values, and a calculation formula control unit #24 for updating the status of a "sales amount of money" field.

Regarding dependent claim 12: Kaneko teaches the output of a spreadsheet showing a scenario in Figure 2A, showing a window in which the "sales amount of money" depends upon the scenario presented regarding the values of the "unit price" and "sales value" data status.

However, Kaneko does not explicitly teach multi-dimensional spreadsheets. Kjaer, though, teaches multidimensional spreadsheets in [0008], disclosing visualizing a series of two-dimensional spreadsheets as a notebook having a plurality of pages (i.e., the conventionally known "multi-dimensional" spreadsheet). Kjaer also teaches multidimensional spreadsheets in [0009], disclosing a three-dimensional spreadsheet having data, charts and formulas for generating charts on each spreadsheet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kjaer for the benefit of Kaneko in view of Kernighan, because to do so would have allowed a programmer to address spreadsheet cells by a different number of variables, thereby minimizing memory and processing time requirements in a multi-dimensional electronic spreadsheet system, as taught by Kjaer in the Abstract. These references were all applicable to the same field of endeavor, i.e., spreadsheet applications.

Regarding dependent claim 13: Kaneko teaches the output of a spreadsheet via a user display device in Figure 2A, showing a spreadsheet window, in the context of Figure 1 #3, a display device.

However, Kaneko does not explicitly teach multi-dimensional spreadsheets. Kjaer, though, teaches multidimensional spreadsheets in [0008], disclosing visualizing a series of two-dimensional spreadsheets as a notebook having a plurality of pages (i.e., the conventionally known "multi-dimensional" spreadsheet). Kjaer also teaches multidimensional spreadsheets in [0009], disclosing a three-dimensional spreadsheet having data, charts and formulas for generating charts on each spreadsheet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kjaer for the benefit of Kaneko in view of Kernighan, because to do so would have allowed a programmer to address spreadsheet cells by a different number of variables, thereby minimizing memory and processing time requirements in a multi-dimensional electronic spreadsheet system, as taught by Kjaer in the Abstract. These references were all applicable to the same field of endeavor, i.e., spreadsheet applications.

Regarding dependent claim 14: Kaneko teaches the presentation of an ordered list in Figure 2A, showing a spreadsheet window having an ordered list of merchandise (ordered from a-c, c being the last entry).

Independent claim 21 is directed to a computer program product for implementing the method of claim 1. As such, this claim is substantially similar to claim 1, and therefore likewise rejected.

Claim 22 is substantially similar to claim 3, and therefore likewise rejected.

10. **Claims 4, 7, 15-18, 20 and 23 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Kaneko et al. (US Patent No. 5,708,827, filed Sep. 18, 1995 and issued Jan. 13, 1998, hereafter referred to as "Kaneko") in view of Kjaer et al. (US Patent Application Publication No. 2002/0091728, filed Dec. 6, 1995 and published Jul. 11, 2002, hereafter referred to as "Kjaer") and further in view of Brian W. Kernighan et al. (The C Programming Language, Prentice-Hall, Inc., Englewood Cliffs, NJ, © 1978, page 41, hereafter referred to as "Kernighan") and Michelman et al. (US Patent No. 5,987,481, filed Jul. 1, 1997 and issued Nov. 16, 1999, hereafter referred to as "Michelman").

Regarding dependent claim 4: Kaneko does not explicitly teach the use of ranges. Michelman, though, teaches the use of ranges in the Abstract and column 9 lines 55-58, discussing the use of a label to represent a range of cells.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Michelman for the benefit of Kaneko in view of Kjaer

and Kernighan, because to do so would have allowed a programmer to reference a range of cells in a spreadsheet formula, as taught by Michelman in the Abstract. These references were all applicable to the same field of endeavor, i.e., computer programming.

Regarding dependent claim 7: Kaneko does not explicitly teach the use of Boolean variable states. Kernighan, though, teaches the well-known programming concept of Boolean variable states, disclosing the use of 0 to represent a "False" state and 1 to represent a "True" state.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kernighan for the benefit of Kaneko in view of Kjaer and Michelman, because to do so would have allowed a programmer to test for a condition (i.e., whether a condition was true), as taught by Kernighan in the first paragraph on page 41. These references were all applicable to the same field of endeavor, i.e., computer programming.

Independent claim 15 states:

A computing system for processing user defined Boolean variables in a multidimensional electronic spreadsheet comprising a plurality of cells identified by a cell address along each dimension, the computing system comprising:

a processor;

a storage device coupled to the processor, wherein the storage device provides a user options table data structure identifying one or more

user options that are defined as Boolean variables, wherein the user options table data structure comprises a record for each user option of the one or more user options, and wherein each record stores an identifier associated with a corresponding user option for the record;

a memory coupled to the processor, wherein the memory contains instructions which, when executed by the processor, cause the processor to:

provide a user interface through which one or more user options are defined, wherein a status of the one or more user options is set via the user interface to either a first Boolean variable state corresponding to a "True" state or a second Boolean variable state corresponding to a "False" state;

reference a selected user option of the one or more user options in one or a plurality of cells of the multi-dimensional electronic spreadsheet by including an identifier associated with the selected user option in content of the one or a plurality of cells;

determine a value of each of the one or plurality of cells based on a status of the selected user option as either being the first Boolean variable state or the second Boolean variable state, as specified via the user interface; and

provide an output of the multi-dimensional electronic spreadsheet via an output device of the computer system.

Regarding these limitations ...

Kaneko teaches a Merchandise Sales Table in Figure 2A, disclosing "Merchandise a" through "Merchandise c" identifiers in rows or records in the Merchandise Sales Table, wherein the "Merchandise a" through "Merchandise c" options are associated with variables (e.g., unit price). Kaneko teaches the spreadsheet graphical user interface (GUI) in Figures 2A and 3A for entering data, noting that data values for "unit price", for example, are set/changed via a user editing the appropriate spreadsheet cell. Kaneko discloses referencing "unit price" and "sales volume" variables in order to determine the value of "sales amount of money" In Figure 2A and column 4 lines 27-36. Kaneko also discloses the display of a spreadsheet in

Figure 2A, showing a spreadsheet window, and the Abstract, discussing spreadsheet display on a display device.

However, Kaneko does not explicitly teach multi-dimensional spreadsheets. Kjaer, though, teaches multidimensional spreadsheets in [0008], disclosing visualizing a series of two-dimensional spreadsheets as a notebook having a plurality of pages (i.e., the conventionally known "multi-dimensional" spreadsheet). Kjaer also teaches multidimensional spreadsheets in [0009], disclosing a three-dimensional spreadsheet having data, charts and formulas for generating charts on each spreadsheet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kjaer for the benefit of Kaneko, because to do so would have allowed a programmer to address spreadsheet cells by a different number of variables, thereby minimizing memory and processing time requirements in a multi-dimensional electronic spreadsheet system, as taught by Kjaer in the Abstract. These references were all applicable to the same field of endeavor, i.e., spreadsheet applications.

Additionally, Kaneko does not explicitly teach the use of Boolean variable states. Kernighan, though, teaches the well-known programming concept of Boolean variable states, disclosing the use of 0 to represent a "False" state and 1 to represent a "True" state.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kernighan for the benefit of Kaneko in view of Kjaer, because to do so would have allowed a programmer to test for a condition (i.e., whether a condition was true), as taught by Kernighan in the first paragraph on page 41. These references were all applicable to the same field of endeavor, i.e., computer programming.

Additionally, Kaneko does not explicitly teach the use of a processor, memory and storage. Michelman, though, teaches the use of a processor, memory and storage in Figure 1, showing a processing unit #14, random access memory #17, and a hard disk drive and interface (#20 and 21) for storage.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Michelman for the benefit of Kaneko in view of Kjaer and Kernighan, because to do so would have allowed a programmer to test for a condition (i.e., whether a condition was true), as taught by Kernighan in the first paragraph on page 41. These references were all applicable to the same field of endeavor, i.e., computer programming.

Regarding dependent claim 16: Kaneko teaches a spreadsheet table of records in Figure 2A, disclosing a spreadsheet table of records having fields for the type of merchandise, a price option associated with the record (labeled as "unit price") and a

value for each unit price record field (e.g., 150). The specific data/fields employed in a record were an obvious variant to one skilled in the art at the time of the invention.

Regarding dependent claim 17: Kaneko teaches a spreadsheet table of records in Figure 2A, in which user options (e.g., "sales price") is listed for the current status of the record, and a field is selected and modified directly by a user, with those modifications being reflected in the updating of the "sales amount of money" field of the modified record. Figure 1 further shows a calculation formula list display unit for listing formula options #25, a reference area extracting unit #23 for identifying the current status of user option values, and a calculation formula control unit #24 for updating the status of a "sales amount of money" field.

Claims 18 and 20 are substantially similar to claims 4 and 7, respectively, and therefore likewise rejected.

Claim 23 is substantially similar to claim 4, and therefore likewise rejected.

11. **Claims 5, 8-9 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Kaneko et al. (US Patent No. 5,708,827, filed Sep. 18, 1995 and issued Jan. 13, 1998, hereafter referred to as "Kaneko") in view of Kjaer et al. (US Patent Application Publication No. 2002/0091728, filed Dec. 6, 1995 and published Jul. 11, 2002, hereafter referred to as "Kjaer") and further in view of Brian W. Kernighan et al. (The C Programming Language, Prentice-Hall, Inc., Englewood Cliffs, NJ, © 1978, page 41, hereafter referred to as "Kernighan") and Julia Kelly (Using Microsoft Excel 97, 3rd Edition, Que Corp., Indianapolis, IN, © 1998, pages 118-122, hereafter referred to as "Kelly"). Note that pages 124-131, 138-144, 154-189, 209-210 and 337-343 of the Kelly reference were provided with the Office Action mailed 1/27/2005.

Regarding dependent claims 5 and 8-9: Kaneko does not explicitly teach the use of an editor or GUI buttons/dialog boxes. Kelly, though, teaches direct editing of cells in Figure 8.1 of page 118, disclosing direct spreadsheet cell editing. Kelly further teaches the use of gui buttons and dialog boxes in Figure 8.4 of page 122.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kelly for the benefit of Kaneko in view of Kjaer and Kernighan, because to do so would have allowed a user to replace data in formulas, as taught by Kelly in the last paragraph on page 120. These references were all applicable to the same field of endeavor, i.e., computer programming.

12. **Claim 19 is rejected under 35 U.S.C. 103(a)** as being unpatentable over Kaneko et al. (US Patent No. 5,708,827, filed Sep. 18, 1995 and issued Jan. 13, 1998, hereafter referred to as "Kaneko") in view of Kjaer et al. (US Patent Application Publication No. 2002/0091728, filed Dec. 6, 1995 and published Jul. 11, 2002, hereafter referred to as "Kjaer") and further in view of Brian W. Kernighan et al. (The C Programming Language, Prentice-Hall, Inc., Englewood Cliffs, NJ, © 1978, page 41, hereafter referred to as "Kernighan") and Michelman et al. (US Patent No. 5,987,481, filed Jul. 1, 1997 and issued Nov. 16, 1999, hereafter referred to as "Michelman") and Julia Kelly (Using Microsoft Excel 97, 3rd Edition, Que Corp., Indianapolis, IN, © 1998, pages 118-122, hereafter referred to as "Kelly"). Note that pages 124-131, 138-144, 154-189, 209-210 and 337-343 of the Kelly reference were provided with the Office Action mailed 1/27/2005.

Regarding dependent claim 19: Kaneko does not explicitly teach the use of an editor. Kelly, though, teaches direct editing of cells in Figure 8.1 of page 118, disclosing direct spreadsheet cell editing.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kelly for the benefit of Kaneko in view of Kjaer and Kernighan, because to do so would have allowed a user to replace data in formulas, as taught by Kelly in the last paragraph on page 120. These references were all applicable to the same field of endeavor, i.e., computer programming.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert Stevens
Examiner
Art Unit 2162

December 18, 2006

MOHAMMAD ALI
PRIMARY EXAMINER